

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) In a fiber optic network including at least one host digital terminal (HDT) that includes at least one optical multiplexing unit (OMU) and at least one optical interface unit (OIU), and including at least one optical network unit (ONU) that includes at least one further OIU, one or more computer readable storage media having computer executable instructions stored thereon for performing a method for automated distribution of software loaded into the OMU, the OIU, and the further OIU, the method comprising:

(a) identifying a version of first software installed on the OMU, the first software being for multiplexing signals from the at least one OIU of the HDT and for communicating with a switch;

(b) determining whether the version of the first software is a first prescribed software version;

(c) only if the version of the first software is not the prescribed software version, downloading the first prescribed software version to the OMU and updating the first software to be the first prescribed software version;

(d) identifying a version of second software installed on the OIU, the second software being for terminating signals from the at least one ONU and for communicating with the OMU;

(e) determining whether the version of the second software second prescribed software version; and

(f) only if the version of the second software is not the second prescribed software version, downloading the second prescribed software version to the OIU and updating the second software to be the second prescribed software version;

(g) identifying a version of third software installed on the further OIU, the third software being for multiplexing a plurality of subscriber connections and for communicating with an OIU of the HDT;

(h) determining whether the version of the third software is a third prescribed software version; and

(i) only if the version of the third software is not the third prescribed software version, downloading the third prescribed software version to the further OIU and updating the third software to be the third prescribed software version.

2. (previously presented) The computer readable media of claim 1, further comprising instructions for contacting the HDT at least to identify the version of the first software and the version of the second software.

3. (canceled).

4. (previously presented) The computer readable media of claim 1, further comprising instructions for determining whether the HDT includes at least a further OMU.

5. (previously presented) The computer readable media of claim 4, further comprising instructions for:

identifying a version of software installed on the further OMU;
determining whether the version of the software installed on the further OMU is a prescribed software version; and
if the version of the software installed on the further OMU is not the prescribed software version, updating the software installed on the further OMU to be the prescribed software version.

6. (previously presented) The computer readable media of claim 1, further comprising instructions for determining whether the HDT includes at least a further OIU.

7. (canceled).

8. (currently amended) A method for automated distribution of software in a fiber optic network including at least one host digital terminal (HDT) that includes at least one optical multiplexing unit (OMU) and at least one optical interface unit (OIU), and including at least one optical network unit (ONU) that includes at least one further OIU, the method comprising:

(a) identifying a version of first software installed on the OMU, the first software being for multiplexing signals from the at least one OIU of the HDT and for communicating with a switch;

(b) identifying a version of second software installed in the further OIU connected to the OMU over a fiber optic connection, the second software being for multiplexing a plurality of subscriber connections and for communicating with an OIU of the HDT;

(c) determining whether there is at least a further ONU connected to the OMU over a fiber optic connection;

if so, then identifying a version of software installed in at least one OIU included in the further ONU, the version of software installed in the at least one OIU included in the further ONU being for multiplexing a plurality of subscriber connections and for communicating with an OIU of the HDT; and

if not, then:

determining if the second software is compatible with the first software; and

only if the first software is not compatible with the second software, then downloading an updated version of the first software to the OMU and updating the first software; and

determining whether the fiber optic network includes at least a further OMU and, if so, repeating the method for the further OMU.

9-10 (canceled)

11. (previously presented) The method of claim 8, wherein determining if the second software is compatible with the first software comprises determining if a version of the second software is compatible with a version of the first software.

12. (previously presented) The method of claim 8, wherein identifying a version of the first software comprises determining a version of software installed on a firmware card in the OMU.

13. (previously presented) The method of claim 12, wherein determining the version of software on the firmware card in the OMU comprises determining the version of software on at least one of an optical interface unit card and an optical multiplexing unit card.

14. (previously presented) The method of claim 8, wherein identifying the software comprised in the OIU comprises determining a version of software on a firmware card located on the OIU.

15. (previously presented) The method of claim 14, wherein determining the version of software on the firmware card located on the network unit comprises determining the version of software on an optical interface unit card.

16. (original) A computer readable medium having computer executable instructions for performing the method of claim 8.

17-19 (canceled)

20. (currently amended) A system for automatically distributing software in a fiber optic network including at least one host digital terminal (HDT) that includes at least one optical multiplexing unit (OMU) and at least one optical interface unit (OIU), and including at least one optical network unit (ONU) that includes at least one further OIU, the system comprising:

a processor for executing computer executable instructions; and

memory for storing computer executable instructions, wherein

said memory has stored therein computer executable instructions for performing

the following steps:

- (a) initiating a single contact with the OMU;
- (b) identifying software comprised on ones of a plurality of firmware cards located in the OMU, the software being for multiplexing signals from the at least one OIU of the HDT and for communicating with a switch;
- (c) determining whether the software comprised on the firmware cards located in the OMU is a prescribed software version;
- (d) only if the software comprised on one of said plurality of firmware cards located in the OMU is not the prescribed software version, downloading the prescribed software version to the OMU and updating the software;
- (e) identifying software comprised on a firmware card located in the ONU, wherein the ONU is connected to the OMU over a fiber optic connection, the software being for multiplexing a plurality of subscriber connections and for communicating with an OIU of the HDT;
- (f) determining whether the software comprised on the firmware card located in the ONU is a prescribed software version; and
- (g) only if the software comprised in the firmware card located in the ONU is not the prescribed software version, downloading the prescribed software version to the ONU and updating the software;
- (h) determining whether there is at least a further ONU connected to the OMU over a fiber optic connection;
 - if so, then performing steps (e) through (g) for the further ONU; and
 - if not, then determining whether there is at least another multiplexor OMU in the fiber optic network and, if so, repeating steps (a) through (h) for the other OMU.